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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,891		03/30/2004	Werner Stamm	1454.1009-CIP	1323
21171	7590	06/06/2006		EXAMI	INER
STAAS & HALSEY LLP				BALDWIN, GORDON	
SUITE 700 1201 NEW	YORK AV	VENUE, N.W.	ART UNIT PAPER NUMBER		
WASHING		•		1775	
				DATE MAILED: 06/06/2006	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		10/811,891	STAMM, WERNER
	Office Action Summary	Examiner	Art Unit
	•	Gordon R. Baldwin	1775
·	The MAILING DATE of this communicat		
Period f	or Reply	••	•
WHIO - External control contro	HORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL ensions of time may be available under the provisions of 37 or SIX (6) MONTHS from the mailing date of this communical operator of the provision of the provision of period for reply is specified above, the maximum statutor ure to reply within the set or extended period for reply will, or reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ING DATE OF THIS COMMUN 7 CFR 1.136(a). In no event, however, may a ation. ry period will apply and will expire SIX (6) MO by statute, cause the application to become A	ICATION. a reply be timely filed ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
Status			
1\⊠	Responsive to communication(s) filed o	n 03 March 2006	
,		☐ This action is non-final.	
, —	Since this application is in condition for		tters, prosecution as to the merits is
,	closed in accordance with the practice u		
Disposit	tion of Claims		
4)🖂	Claim(s) 6-19 is/are pending in the appl	ication.	
,	4a) Of the above claim(s) is/are w		
5)□	Claim(s) is/are allowed.		
6)⊠	Claim(s) <u>6-19</u> is/are rejected.		
7)	Claim(s) is/are objected to.		
8)[Claim(s) are subject to restriction	and/or election requirement.	
Applicat	tion Papers		
9)[The specification is objected to by the Ex	xaminer.	
,	The drawing(s) filed on 30 March 2004 is		ojected to by the Examiner.
, —	Applicant may not request that any objection		
	Replacement drawing sheet(s) including the	correction is required if the drawin	g(s) is objected to. See 37 CFR 1.121(d).
11)[The oath or declaration is objected to by	the Examiner. Note the attache	ed Office Action or form PTO-152.
Priority	under 35 U.S.C. § 119		
•	Acknowledgment is made of a claim for	foreign priority under 35 H S C	8 119(a)-(d) or (f)
	Acknowledgment is made of a claim for ⊠ All b) Some * c) None of:	loreign priority under 33 0.3.0.	3 1 19(a)-(a) or (i).
a,	1.⊠ Certified copies of the priority doc	cuments have been received	
	2. Certified copies of the priority doc		Application No.
	3. Copies of the certified copies of the		
	application from the International	•	in received in this National Stage
*	See the attached detailed Office action for		at received
		7 E 100 01 110 00 110 00 110	- · - · ·
Attachmei	nt(s)		
1) 🛛 Noti	ice of References Cited (PTO-892)		Summary (PTO-413)
	ce of Draftsperson's Patent Drawing Review (PTO-		o(s)/Mail Date Informal Patent Application (PTO-152)
	rmation Disclosure Statement(s) (PTO-1449 or PTC er No(s)/Mail Date <u>20040811</u> .	D/SB/08) 5) ☐ Notice of 6) ☐ Other:	

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6,11-16,18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sommer (Pat. No. 6,280,857 B1).

Support for the specific combination of the composition and phase is not considered to have priority date of 4/22/1999. It is noted that none of the priority documents recite the specific combination of 24-26% Co with the other composition limitations. Therefore the claims are afforded a priority date of 3/30/04.

Consider claim 6 and 14, Sommer teaches a protective coating for super-alloy structural parts especially for gas turbine engines (Abstract). The MCrAIY coating is shown to be in the gamma phase. (Claim 7) Additionally, Sommer's teaching of ranges for the composition of the coating encompass the amount of cobalt used as well as the use of nickel and yttrium or lanthanum or lanthanum-series elements and a over-lapping amount of rhenium (Col. 4 Lines 60-67)

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Consider claims 11, 12 and 13, Sommer teaches, in column 4 lines 59-68,

Chromium from 11-15 wt%, Aluminum from 11.5-14 wt%, Rhenium from 1-8 wt % and

Cobalt from 18-28 wt% and Yttrium from 0.3-1.3 wt% and 0-0.5 wt% of a total of

Lanthanum or Lanthanum-series.

Consider claim 15, The MCrAIY coating is shown to be in the gamma phase.

(Claim 7)

Consider claim 16, Sommer teaches, in column 4 lines 59-68, Chromium from 11-15 wt%, Aluminum from 11.5-14 wt%, Rhenium from 1-8 wt % and Cobalt from 18-28 wt% and Yttrium from 0.3-1.3 wt% and 0-0.5 wt% of a total of Lanthanum or Lanthanum-series.

Consider claims 18 and 19, Sommer does not teach that its protective layer has chromium-rhenium precipitates; therefore Sommer is considered to not possess the chromium-rhenium precipitates.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 8, 9, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sommer (Pat. No.6280857 B1) as applied above, and further in view of Kojima (Pat. No. 5,507,623).

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Consider claim 7, while Sommer teaches MCrAlY coating on the proper composition ranges and in the gamma phase (Col. 4 lines 60-67 and Claim 7), Sommer does not teach the use of dual MCrAlY layers in gas turbine components. However, Kojima does teach the use of dual MCrAlY layers in gas turbine components with one layer being laid directly on top of the other. (Col. 4 lines 5-14) It would have been obvious to a person of ordinary skill in the art at the time of invention to have combined the gamma-phase MCrAlY composition of Sommer with the dual layered MCrAlY of Kojima to provide a coating with greater resistance to corrosion and high temperatures. (Kojima Col. 4 lines1-3)

Consider claim 8, Kojima teaches the use of an inner and outer layer MCrAlY layer (Col. 4 lines 5-14) while Sommer teaches an MCrAlY layer in the gamma phase (Claim 7). However the use of re-melting by electron or ion beams is considered to be a product by process limitation and "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.", (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious different between

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the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Consider claim 9, Kojima teaches the use of an inner and outer layer MCrAlY layer (Col. 4 lines 5-14), while Sommer teaches an MCrAlY layer in the gamma phase (Claim 7). However, the use of "electrodeposition" in applying the outer layer is considered to be a product-by-process and "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.", (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious different between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Consider claim 10, Sommer teaches the use of zirconia in a MCrAlY layer.

(Col. 7 lines 5-10)

Consider claim 17, Sommer teaches, in column 4 lines 59-68, Chromium from 11-15 wt%, Aluminum from 11.5-14 wt%, Rhenium from 1-8 wt % and Yttrium from 0.3-1.3 wt% and 0-0.5 wt% of a total of Lanthanum or Lanthanum-series. While the chromium and the aluminum do not overlap the wt. percentages of claim 17, they are

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substantially close to that of claim 17 that one of ordinary skill would have expected compositions that are in such close proportions to those in prior art to be prima facie obvious, and to have same properties (*Titanium Metals Corp.*, 227 USPQ 773 (CA FC 1985)).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon R. Baldwin whose telephone number is (571)272-5166. The examiner can normally be reached on M-F 7:45-5:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GRB

JENNIFER C. MCNEIL
SUPERVISORY PATENT EXAMINER
51/51/60